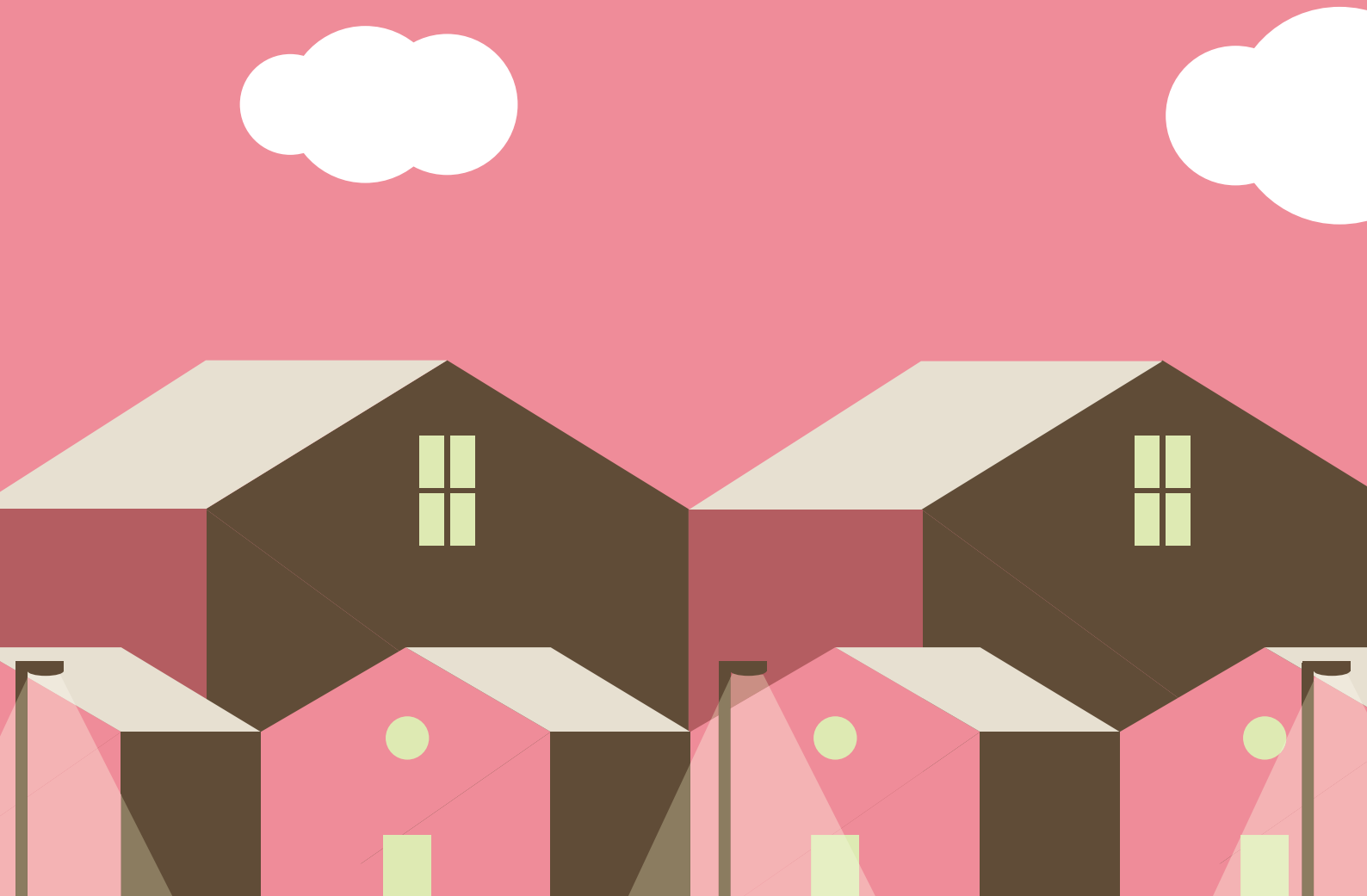


Best Kept Secret: The Value Of Clinical Homecare To The NHS, Patients And Society



Contents

Foreword	3
Executive summary	4
Clinical Homecare explained	8
Defining the value of Clinical Homecare	18
The opportunity ahead	28
Recommendations	30
Appendix	32

Acknowledgements

This report seeks to improve understanding of Clinical Homecare. It has been commissioned by the National Clinical Homecare Association (NCHA) and steered by an independent panel of experts. The report has been written by **ZPB Associates**, with economic modelling and analysis from **Edge Health**. **Carol McCall** supported the provision of NCHA industry data and use of technical language.

The NCHA would like to thank the following for their contributions to this report. These individuals are acting in a personal capacity.

Mark Hackett, EX-CEO of Swansea Bay NHS Health Board and author of 'Vision for Future of Homecare Medicines' (2011). **Stephen Cook**, Chief Pharmacist, Medway NHS Foundation Trust. **Sharon Petford**, Former Chair of the Royal College of Nursing Rheumatology Nursing Forum. **Stephanie Westwood**, Vice Chair of the NCHA and Head of NHS Hospital Services for Alcura and Alliance Healthcare UK limited. **Allison Davis**, Former Chair of the NCHA and Managing Director of Pharmaxo Healthcare. **Adrian Wilkinson**, Pharmacy Services Director at Lloyds Pharmacy Clinical Homecare. **Brian Duggan**, General Manager and Superintendent Pharmacist at Polar Speed. **Chris Carver**, board member of the NCHA and Deputy Chief Executive of HealthNet Homecare. **Andrew Wilson**, Head of NHS East Midlands Pharmacy Collaborative. **Liz Lazenby**, Head of Strategic Category Management Medicines and Homecare at NHS England. **Richard Chapple**, Homecare Services Manager at Royal Papworth Hospital NHS Foundation Trust.

Special acknowledgments to **Wing Tang**, Head of Professional Standards at the Royal Pharmaceutical Society, and the Royal Pharmaceutical Society for their review of specific sections of the report, ensuring accuracy and alignment with RPS policy and standards.

Foreword



Mark Hackett

EX-CEO of Swansea Bay NHS Health Board and author of 'Vision for Future of Homecare Medicines' (2011)

Clinical Homecare offers a major opportunity to the NHS and wider society. The patient benefits of this service can be enormous. But only when the NHS and Clinical Homecare providers work effectively together, driving better patient experience, outcomes and access to services. I've seen the benefits of Clinical Homecare myself, with members of my family receiving healthcare in this way, allowing them to continue their life with minimal disruption.

In 2011, I was asked by the Department of Health to lead a review of the Clinical Homecare industry. This led me to make several clear recommendations, with a focus on improved governance, procurement and co-production. More than a decade later, I am pleased to have been asked by the NCHA to chair the expert panel steering this new report and to work with the industry once again. This has been a robust and detailed process, giving us new insight and a greater understanding of this complex industry.

Much has changed over the last 13 years. The industry has grown, with 300,000 more people now receiving Clinical Homecare on the NHS. There is now greater consistency, with clear performance KPIs adopted by all Clinical Homecare providers. This has helped the industry to make great strides forward, yet the sense of unfulfilled potential remains.

Clinical Homecare remains absent from the NHS' long-term planning, while newer unproven models of care are positioned as the solution to established challenges. The recent House of Lords inquiry highlighted the need for a better understanding of the industry from senior responsible stakeholders in the NHS, DHSC, CQC and more. This includes the strategic opportunity of Clinical Homecare, and the specific detail of how it is contracted, funded, and delivered.

It is my hope that this report will help to answer some of these questions, providing a clear view 'under the hood' of the industry and highlighting the value it brings to patients, to the NHS, and to society at large. I am also pleased that we have been able to include an objective patient survey, helping to understand and articulate the impact Clinical Homecare has on people's lives. The report also includes clear recommendations to all parties, which I hope will lead to further industry development and improvement.

I would like to thank the steering group for giving up their time and expertise over the last few months. Your input has been fundamental to the creation of a report that is objective, insightful and also hopeful. As an expert panel, it is our ambition that this report will be an important step forward, bringing clarity and showing the opportunity that lies ahead.

I hope this report will be a rallying call to the parties involved. If we can bring together the NHS, the pharmaceutical industry, Clinical Homecare providers, and patients, united around a shared understanding and strategic view, then the opportunity is significant.

Executive summary

Clinical Homecare offers a unique solution to some of the NHS' key challenges. But due to a lack of understanding and leadership, it remains one of the NHS' best kept secrets.



This report seeks to improve understanding of Clinical Homecare and the value it brings to patients, the NHS and society at large. Work on this report started before the recent House of Lords inquiry was commissioned. The report acknowledges the inquiry, the recommendations and the government's response. It is hoped that this report will provide useful information that contributes to this important conversation.

Over 600,000¹ people across the UK are currently receiving healthcare via an NHS-contracted Clinical Homecare provider. These services are mainly used to treat long-term or chronic health conditions, conditions that would otherwise require regular visits to a hospital or pharmacy. The decision to use Clinical Homecare is jointly made by the patient and their medical team. The service is often funded by the pharmaceutical manufacturer, but in some cases, it is directly funded by the NHS.

While every patient's needs are different, these services fall into three pathways:

1



Dispense and delivery of medications, usually to an individual's home, and clinical waste disposal

2



Delivery of medicines with virtual training for the patient

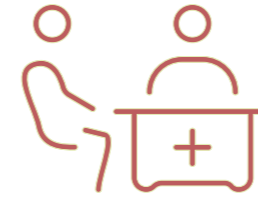
3



Delivery of medicines with clinical support for treatment in the home

Using Clinical Homecare offers a range of benefits:

Benefits to patients



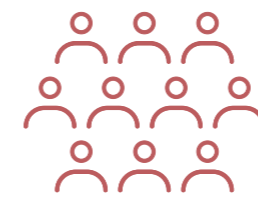
- Improved experience and personalised healthcare delivery
- Reduced need to travel to appointments – allowing people to work and retain independence
- Improved geographical access, helping to tackle inequalities
- Improved adherence to treatment
- Safeguarding opportunities as specialist clinical staff visit patients at home

Benefits to NHS



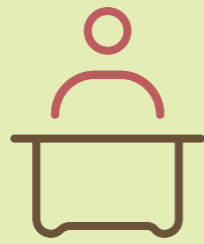
- Increased capacity by extending services outside of hospital
- Financial savings and value
- Reduced wastage and improved medicines adherence
- Reduced did-not-attend rates
- Improved medicines stock keeping and management
- Improved patient satisfaction
- Efficient switching of medicines - with significant financial benefits

Benefits to society

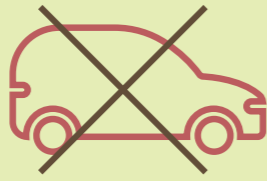


- Improved patient participation in employment and education
- Reduced carbon emissions and traffic congestion
- Improved pharmacovigilance, supporting safe medicines for all

For the first time, this report seeks to quantify these benefits via detailed economic modelling and an objective patient survey. This has allowed us to shine new light on the value of Clinical Homecare services:



62%
of people receiving Clinical Homecare reported that it has allowed them to stay in work or education.**



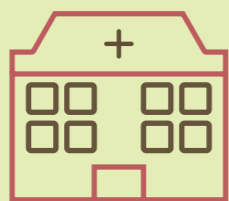
75,000
Clinical Homecare patients avoid a 40-mile round trip with each delivery, mitigating geographical inequalities and burden.*



85%
of Clinical Homecare patients are more likely to report that their medicines were fully explained to them, compared to the national average of 62%.**



£264m
represents the annual value delivered to UK health economy - delivered through operational savings, enhanced patient experience, and societal benefits.*



15 NHS
Trusts worth of day case elective capacity is delivered each year by Clinical Homecare companies.*

* These statistics have been calculated through validated economic modelling using NHS datasets, NCHA datasets, literature reviews and insights from independent advisors.

** These statistics have been derived from an independent patient survey.

*** Based on the number of people living with conditions that could be appropriate for Clinical Homecare.

Please refer to the appendix for a detailed explanation of how these figures have been developed.

Much more could be achieved.

An estimated 6.8 million people are living with a health condition that could be appropriate for Clinical Homecare*** and the industry has the ability to grow. With the NHS facing severe workforce and capacity challenges, Clinical Homecare could be a solution once again.

Positive changes to the industry and the systems around it could support this growth. Our report concludes with a series of recommendations which would help ensure a Clinical Homecare industry that is sustainable and fit for growth:

1

Increased transparency from all parties, supported by better sharing of performance data with regular, robust and meaningful patient engagement

2

Implementation of strategic leadership of Clinical Homecare at a national and regional level alongside improved regulation

3

A review of contracting and commissioning regimes to support sustainable long-term planning

4

Dedicated resources and funding made available in the NHS for the planning, contracting and commissioning of Clinical Homecare

5

Increased standardisation across the industry, supported by expanded use of technology

As this report shows, the value and potential of Clinical Homecare is significant. It helps people access healthcare in a place that best suits their needs, with further benefits to the NHS and society at large.

Clinical Homecare explained



Significant pressures face UK healthcare services. The NHS has clear ambitions to improve equity of access, enhance patient experience, and improve efficiency. But it is increasingly struggling to achieve these objectives.

The NHS must look to alternative models if it is to meet the ever-changing needs of UK patients. Combining clinical resource, geographical reach, medicines supply management and significant value for money, Clinical Homecare offers a unique alternative to traditional healthcare delivery across current patient pathways.

The industry has the potential to transform how care is delivered, with significant benefits for patients, the NHS and society at large.

Commissioned by the National Clinical Homecare Association (NCHA) and steered by an independent panel of experts, this report seeks to improve understanding of Clinical Homecare. Considering both challenges and opportunity, it articulates the benefits of these services and the significant value they unlock.

What is Clinical Homecare?

Clinical Homecare is a wide-ranging service, covering specialist medicines storage and delivery, and in some cases the specialist administration of medications by a trained healthcare professional in a patient's home.¹ These services are most often managed and delivered by private Clinical Homecare providers, working in partnership with the NHS and pharmaceutical manufacturers. These organisations have the capacity to deliver services at scale, treating people with simple to complex diseases around the UK.

The NHS has been offering Clinical Homecare services for 30 years. By visiting people where they are, Clinical Homecare enables continuous monitoring of patients throughout their care, helping to ensure best quality of life and clinical safety. This also reduces the number of hospital visits and empowers individuals to maintain independence and quality of life.

How are Clinical Homecare services delivered?

The NHS commissions Clinical Homecare services from the 18 major Clinical Homecare providers in the UK. Between them they are responsible for supporting around 600,000 patients, with some Clinical Homecare providers operating across a larger part of the market than others.

About the National Clinical Homecare Association:

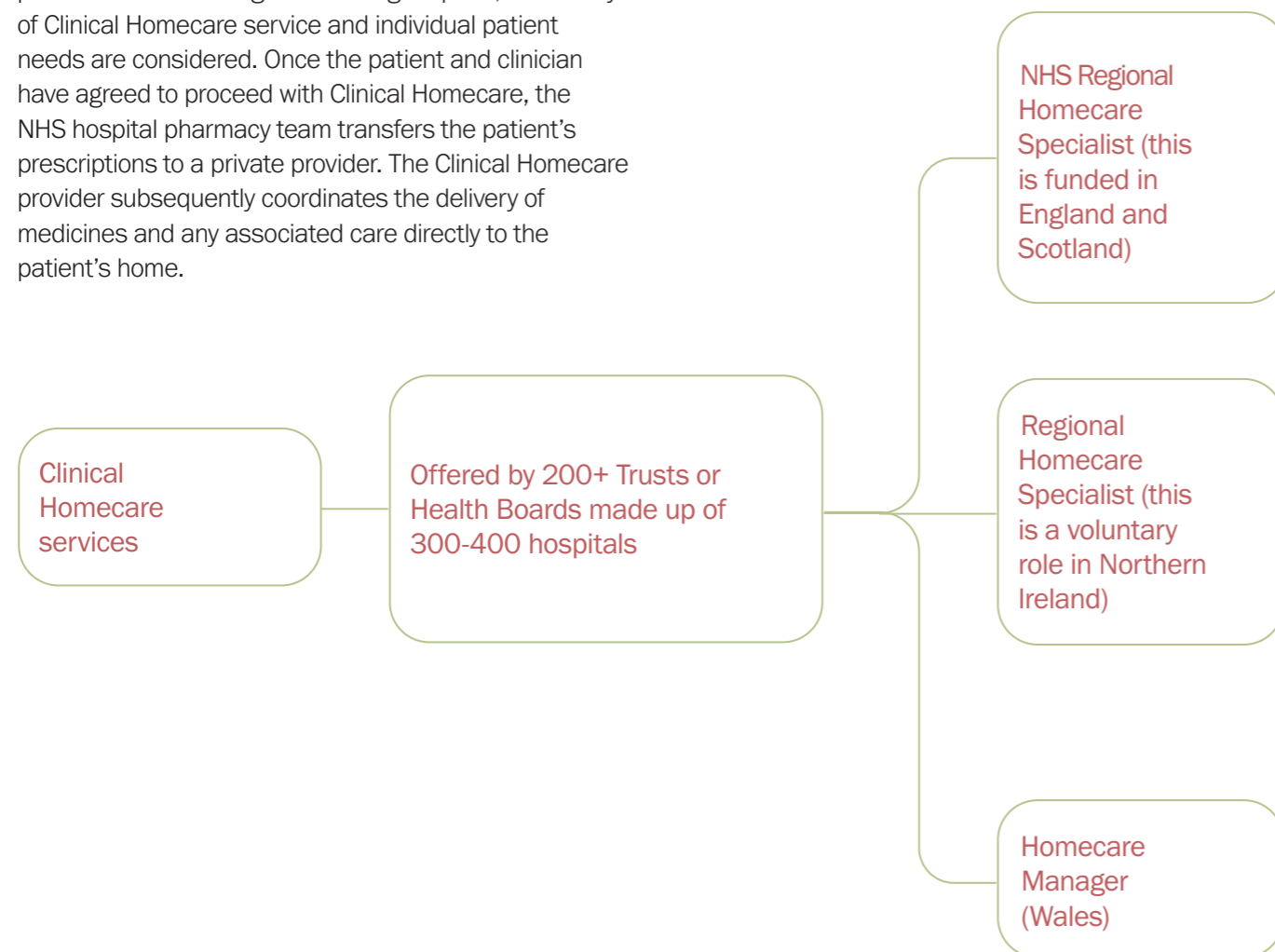
Established in 2006, the NCHA is a trade body for the Clinical Homecare industry.² The NCHA works closely with the NHS, pharmaceutical manufacturers, commissioners and patients to ensure that services are delivered to a high standard. All companies that provide national Clinical Homecare services are members of the NCHA. These organisations are responsible for approximately 95% of patients receiving Clinical Homecare. The members abide by the NCHA Code of Practice and membership criteria to ensure they are meeting exact standards in all areas of homecare.

Who uses Clinical Homecare?

Clinical Homecare is offered by many hospitals and Health Boards around the UK. The decision to contract a Clinical Homecare provider is a collaborative process, with the Chief Pharmacist having overall responsibility for the provision within each organisation. This decision is based on financial viability and patient need. Clinical Homecare is increasingly being used to improve access to treatments and make best use of limited NHS resources.

Clinical Homecare services are used to treat a variety of acute and long-term conditions. This includes home parenteral nutrition for patients who have difficulty eating normally, or intravenous medications for immune system conditions. It also includes specialist medicines including those for respiratory, musculoskeletal and cardiovascular conditions, as well as cancer, blood disorders and infections.^{iv}

The decision for an individual to receive Clinical Homecare is made by the clinical team, in consultation with their patient. When deciding if it is the right option, availability of Clinical Homecare service and individual patient needs are considered. Once the patient and clinician have agreed to proceed with Clinical Homecare, the NHS hospital pharmacy team transfers the patient's prescriptions to a private provider. The Clinical Homecare provider subsequently coordinates the delivery of medicines and any associated care directly to the patient's home.



How are Clinical Homecare services managed?

The operational management of Clinical Homecare services varies across the UK. In England, Scotland and Northern Ireland, each NHS region appoints a Regional Homecare Specialist, typically a pharmacy or procurement professional, to oversee Clinical Homecare services and contracting. In Wales, a Homecare Manager is responsible for coordinating and managing Clinical Homecare services. Every hospital and health board that provides Clinical Homecare is also expected to have a Pharmacy Homecare Team. Where there is no dedicated team, the coordination of these services is managed by members of the pharmacy team.

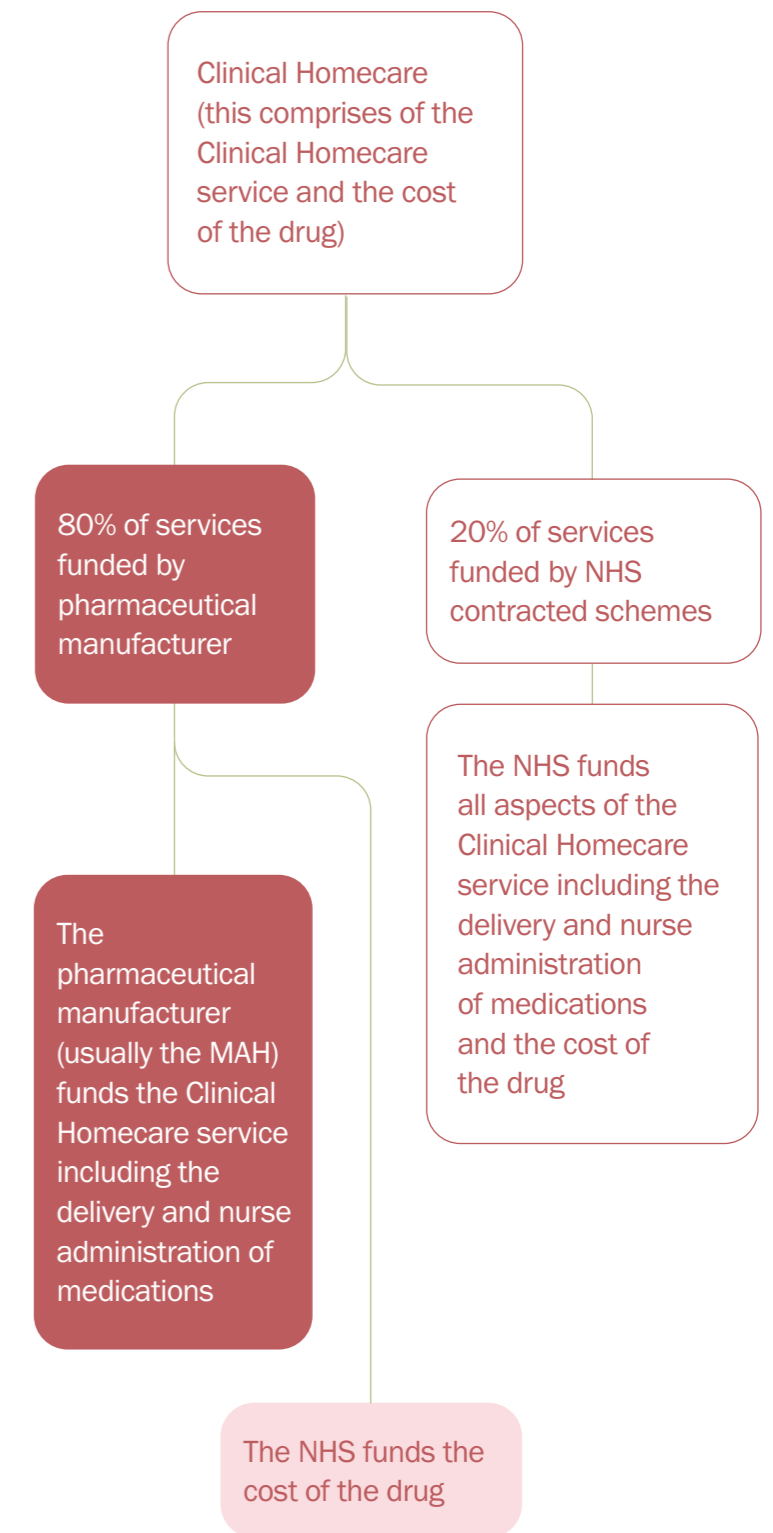
How are Clinical Homecare services funded?

The funding for Clinical Homecare services varies depending on the medicine being supplied. In most cases, funding comes from either the NHS or from the pharmaceutical manufacturer as part of their medicine supply chain costs. In a small number of cases, the service can be privately funded by individual patients or under private health insurance.

Clinical Homecare services funded by the NHS can be procured at national, regional, or local levels. The Commercial Medicines Unit (CMU) negotiates national pricing for medicines directly with pharmaceutical manufacturers, ensuring value for money for the NHS. The CMU is supported by the National Pharmaceutical Supply Group (NPSG) and Pharmaceutical Market Support Group (PSMG).

NHS commissioners fund the medicines distributed by Clinical Homecare providers, with funding allocated at either national or system level. Various systems, for example English Integrated Care Boards (ICBs), decide how the funding is allocated down to the local level.

The funding mechanism depends on the medicine supplied and the condition being treated. Funding for medicines is usually managed as part of block contracts between commissioners and hospital or Health Boards. Alternatively for some conditions, it can be managed using a cost and volume arrangement where the cost of medicines is paid by the hospital and reimbursed directly by the commissioner. Healthcare systems normally undertake a forecasting exercise to set budgets for high-cost medicines in advance, as part of the annual business planning process.





Explaining the relationship between pharmaceutical manufacturers and Clinical Homecare companies

Pharmaceutical manufacturers play a pivotal role in Clinical Homecare. They establish contracts with Clinical Homecare providers, ensuring a seamless supply of designated products along with associated services to both NHS and private patients.

The involvement of pharmaceutical manufacturers extends beyond financial contributions.^v Manufacturers actively engage in setting up contractual frameworks with Clinical Homecare providers. This includes selecting products suitable for Clinical Homecare, determining the type of service to be provided, as well as identifying and selecting optimal Clinical Homecare providers capable of delivering these services.

Manufacturers are responsible for producing and supplying Clinical Homecare providers with high-quality medications and medical devices. Pharmaceutical manufacturers provide Clinical Homecare companies with comprehensive information for the specified product. This includes standards they expect to be applied to the Clinical Homecare service, specific storage and handling requirements, standard product administration protocols, communication procedures for how pharmacovigilance and safety data is communicated to the NHS and manufacturer, as well as their expectations for managing complaints associated with their medicines. Manufacturers also provide significant support in the form of standardised homecare staff training, best practice patient training protocols and patient information. These are continuously monitored and improved to support best outcomes from the use of their medicines.

This arms-length, collaborative approach between pharmaceutical manufacturers and the NHS via Clinical Homecare providers supports best practice and positive communication with patients. This helps to foster positive experience and best clinical outcomes.

Who regulates Clinical Homecare services?

Responsibility for regulating Clinical Homecare services in the UK is split between several bodies. The main regulators include the General Pharmaceutical Council (GPhC), Care Quality Commission (CQC), Regulation and Quality Improvement Authority (RQIA), Care Inspectorate, and Medicines and Healthcare products Regulatory Agency (MHRA).

Clinical Homecare providers also work with the NHS National Homecare Medicines Committee, NHS Commercial Medicines Unit, NHS England, NHS Scotland, NHS Wales, hospitals and Health Boards to ensure that they are meeting agreed KPIs. All Clinical Homecare services provided for the NHS must comply with the latest Professional Standards for Homecare Services, set by the Royal Pharmaceutical Society.^{vi}



Stephen Cook

Chief Pharmacist at Medway Maritime NHS Foundation Trust

Medway Maritime Hospital is a 500 bedded District General Hospital providing acute care to a population of 430,000 on the north Kent coast. The Pharmacy department manages the Clinical Homecare services for over 2,600 patients across a range of different therapy areas and is nationally a high user of Clinical Homecare compared to the number of beds in the organisation. The most prevalent patient group sits within rheumatology, and the therapy area with the highest rate of growth is in oncology.

The department has a dedicated Clinical Homecare unit consisting of a part-time pharmacist, pharmacy technician and administrative support. The team is committed to looking after our patient's interests, monitoring service performance against the agreed service levels and processing invoices and prescriptions, ensuring the latter are safe and timely. The team utilises a range of different suppliers and regularly meets with the principal Clinical Homecare providers to discuss service delivery.

Within Medway, we have chosen to offer our patients Clinical Homecare as an option to improve their overall experience. Historically, our patients would need to attend the pharmacy following their consultation to collect their medicines, with the additional waiting time commonly associated with a busy department. Clinical Homecare provided the opportunity for patients to plan their deliveries more around their lives. Furthermore, during the pandemic, attendance 'on site' for an out-patient episode presented an additional infection risk to a vulnerable patient group, whereas Clinical Homecare provided a safer alternative supply method. Anecdotal feedback from our patients has been positive, and whilst the driver remains improved patient experience, it is currently a more cost-effective supply route.

What types of services do Clinical Homecare companies provide?

The services provided by Clinical Homecare companies vary in complexity. For the purpose of this report, we've categorised these services into three pathways: low tech, mid tech and high tech. This split is not always well defined, as each patient has specific needs. This approach has enabled us to quantify the benefits and value of these pathways.

The **low tech** pathway is the dispensing and delivery of medicines, and disposal of any clinical waste. This is typically a self-administration oral therapy using licensed medicines. It can also include uncomplicated medical devices or licensed medicines, suitable for storage in a domestic setting.^{vii}

An example of the low tech pathway is oral transplant medication used by people who have had a transplant to reduce the risk of the rejection. This pathway starts with a patient visiting their healthcare professional to get a prescription. On the traditional hospital pathway, patients need to return to the hospital pharmacy to collect subsequent prescriptions. For patients on this Clinical Homecare pathway, medication will be delivered directly on average 2.1 times a year to their home.

The **mid tech** pathway includes parts of the low tech pathway, plus a patient training element. This sees a specialist clinical trainer work with the patient, so they understand their condition and medication, helping them to adhere to treatment plans and supporting improved outcomes. Training may be in person or virtually. It is usually delivered alongside initial doses and continues until the patient can successfully self-administer their medicine. Patients on this pathway have continued access to Clinical Homecare support teams who provide further help and re-visit training as required.

An example of a medicine delivered in this way is adalimumab, a biologic that can be used to treat inflammation in various parts of the body, such as the joints, skin or gut.^{vii} It is given as an injection and is typically self-administered by the patient at home, with patients trained by a healthcare professional on the correct injection technique.

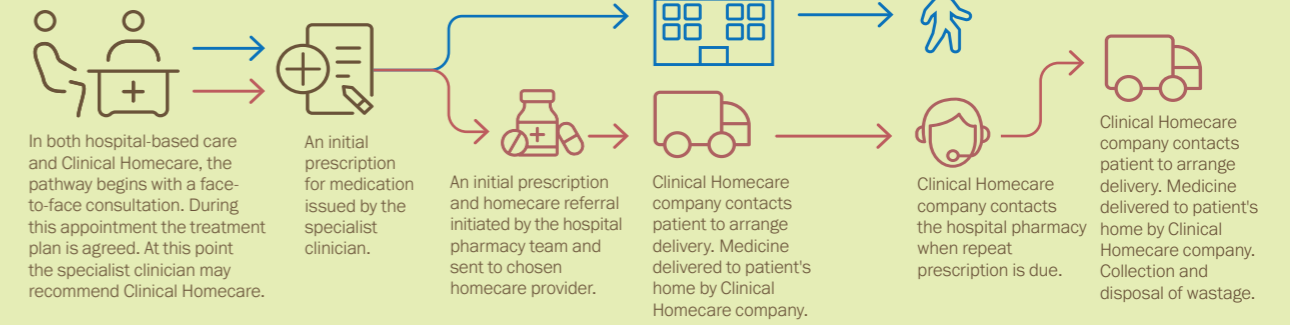
The **high tech** pathway includes elements of the low and mid tech pathways plus additional clinical support, up to and including regular in-person visits from a healthcare professional who will administer the treatment. All high tech patients have access to clinical support and will have scheduled in-person visits to check their status.

Patients on this pathway receive a delivery of medication on average 7.5 times a year to their home. For some patients, this can be several times a week. These in-person visits are needed due to complex treatment plans and because the patients are usually more vulnerable. Receiving treatment in this way represents a significant alleviation of burden for the patient.

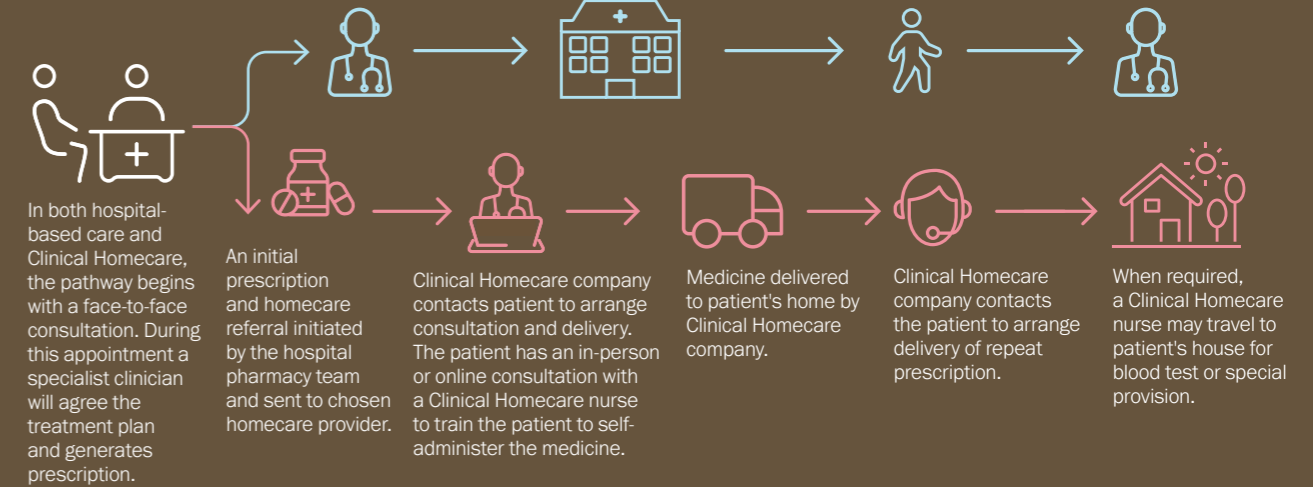
In some cases, high tech patients can be trained to self-administer their complex specialist medicines. Clinical Homecare services for high tech patients who self-administer can increase to in-person visits by a healthcare professional when required, helping to avoid hospital admission.

Enzyme replacement therapy (ERT) is an example of a high tech therapy. It is used to treat lysosomal storage diseases such as Gaucher disease or Fabry disease. ERT is administered as intravenous (IV) infusions in order to correct the patient's enzyme deficiency. ERT is a life-long therapy, and IV treatment is typically required on a fortnightly basis, taking around four hours to complete.

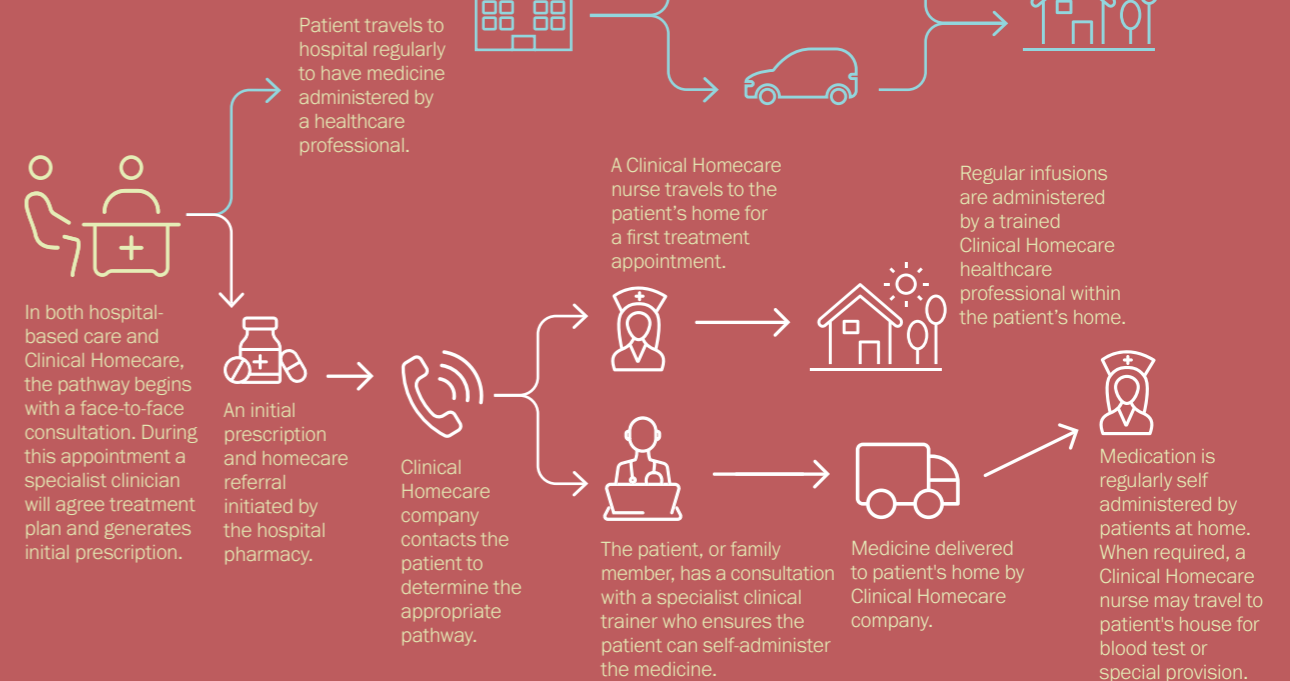
LOW TECH PATHWAY



MID TECH PATHWAY



HIGH TECH PATHWAY



“



Living with myasthenia gravis since he was 13 years old, Rhys now has his treatment administered at home by a Clinical Homecare nurse

I was diagnosed with myasthenia gravis at 13 years old. It is a really tough condition that affects my muscles. I struggle to lift my arms; have droopy eyelids and I find it hard to swallow food or liquids. I was training to be a chef, but my condition got so bad I could no longer work. I couldn't do basic tasks like showering or cooking, and my family would have to help put me to bed. I was essentially house bound for years. This was terrible for my mental health; I developed depression and a fear of going outside because my body could shut down at any time. My parents were getting up very early to take me to my hospital appointments and it was affecting all of our lives.

Last year, my doctor suggested I try a new treatment, which was available via Clinical Homecare. My nearest hospital was an hour's drive away, so I'd have to leave my home very early and find someone to take me in my wheelchair to get my weekly infusions. When I was told I could have my treatment at home it was such a relief.

The nurse comes to my home once a week to set up and run my infusion treatment and sits with me after to check I am ok. It's very similar to what happens as a day patient, but it takes so much less time without all the travel. In hospital, nurses will be looking after multiple patients, but the one-on-one experience I get with Clinical Homecare means I can have great conversations with the nurses, and I know I am being listened to. Clinical Homecare has made life so much easier, and my new treatment has really improved my life. I am able to leave the house more often, I have started golf as a hobby and one day hope to return to work as a chef.

“

Living with bronchiectasis at 90 years old, Mary receives regular deliveries of her treatment to her home.

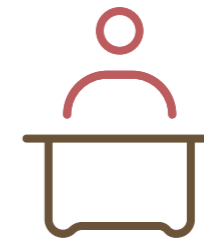
In recent years, I've been suffering from breathing difficulties. I get out of breath from walking short distances, and couldn't climb up stairs so have had to move downstairs in my home. This was worsened by a mini stroke, which has led to no use of my left leg or arm. I have to use a frame and stick everywhere I go. Frustratingly, this means I can no longer leave my house on my own and rely on my neighbours and son to deliver my groceries.

I've started getting my medication delivered to my home which has been very helpful for me. I already rely on other people so much, I'm glad that I can keep some independence.

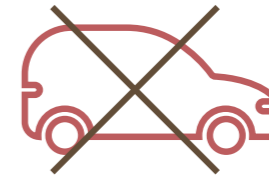
It's a relief to know my medication will be delivered consistently and on schedule. I've noticed if I don't take my medication on time, I become breathless throughout the day. Without my medication I would be even more limited in what I can do and I feel very lucky that the NHS has made this service available to me.

Defining the value of Clinical Homecare

This section highlights the quantitative and qualitative benefits of Clinical Homecare to patients, the NHS and society. The quantitative benefits have been uncovered through validated economic modelling using NHS datasets, NCHA data, literature reviews and assumptions from independent advisors. Qualitative benefits have been identified through a fully independent patient survey^{ix} and literature reviews. Please see the appendix for a detailed explanation of how these figures have been developed.



62%
of people receiving Clinical Homecare reported that it has allowed them to stay in work or education.**



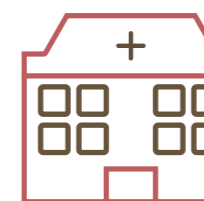
75,000
Clinical Homecare patients avoid a 40-mile round trip with each delivery, mitigating geographical inequalities and burden.*



85%
of Clinical Homecare patients are more likely to report that their medicines were fully explained to them, compared to the national average of 62%.**



£264m
represents the annual value delivered to UK health economy - delivered through operational savings, enhanced patient experience, and societal benefits.*



15 NHS
Trusts worth of day case elective capacity is delivered each year by Clinical Homecare companies.*

* These statistics have been calculated through validated economic modelling using NHS datasets, NCHA datasets, literature reviews and insights from independent advisors.
** These statistics have been derived from an independent patient survey. Please refer to the appendix for a detailed explanation of how these figures have been developed.

1

Benefits to patients

To gain an objective understating of patient experience, we commissioned an independent survey of 804 patients across the UK. 404 respondents have received treatment through Clinical Homecare and 400 have received treatment for an equivalent condition within a hospital, GP or pharmacy setting. These participants are a nationally representative sample, encompassing all UK regions and nations. People from a range of demographics and backgrounds took part.



Independence and health

We asked respondents in both cohorts what impact they thought treatment had had on their health, recovery, relationships, ability to work and ability to get on with life. In all cases, a significantly higher proportion of people receiving Clinical Homecare reported a positive impact. Notably, Clinical Homecare almost doubles the perceived ability to “get on with life”.

	Receiving Clinical Homecare	Receiving the same care in a hospital, GP or pharmacy
A positive impact on health	79%	36%
A positive impact on recovery	72%	41%
A positive impact on relationships	64%	27%
A positive impact on ability to work	58%	26%
A positive impact on ability to get on with life	75%	39%



Sunaina, a liver transplant patient, received Clinical Homecare from March 2019 until undergoing a liver transplant in May 2020

My treatment involved administering antibiotics at home, every day, for 15 months. Clinical Homecare nurses visited me three times every day, in the morning, afternoon and evening. They were always really accommodating. They'd move the visits around so that I'd be seen a little sooner or a little later, to give me as much freedom as I could possibly have.

If I needed to change the schedule, or if I needed medication, they'd speak with the hospital rather than me having to do it – whether it was picking up medicine or speaking to a doctor about getting something prescribed. It was great to have them around. I had around 10 nurses on rotation, and I built up a relationship with every one of them. Every time I had an appointment with bad news, the nurses were so supportive. I could talk to them not just about the illness, but about anything. I can't say enough good things about them; they were incredibly helpful.

For mid and high tech pathways, the service includes specialist healthcare professionals visiting patients in their home and teaching them to self-administer their own medications. This approach empowers patients with the knowledge and skills needed to manage their health conditions independently. This also encourages patients to actively participate in their treatment, promoting a greater level of self-management and independence. Bringing healthcare to patient's homes reduces the need for dependency on family members or caregivers, fostering a greater sense of independence and improved wellbeing.



Remaining in work or education

For many people, healthcare can make it difficult to remain in regular employment. As a result, people with long-term conditions can be forced to take less demanding work, reducing their earning potential. Long-term sickness can also severely impact education, which in turn reduces opportunities in later life. Evidence shows that 2.6 million people of working age are out of work due to long-term health conditions.^x Latest data suggests that more than 40,000 working-age adults are beginning a disability benefits claim each month – up from less than 20,000 before the COVID-19 pandemic.^{xi} This is expected to cost the UK nearly £16bn in higher welfare spending and lost tax revenues a year in 2023/24.^{xii}

A significant benefit of Clinical Homecare lies in its flexibility to individual needs, which often allows people to keep working or return to work. Individuals can receive care in an environment that is conducive to their comfort and well-being whilst also aligning with their personal or employment schedules.

Our survey clearly underlines this benefit. 62% of people receiving Clinical Homecare reported that receiving healthcare in this way has allowed them to stay in work or education. Conversely 39% of those who don't use Clinical Homecare reported that the various appointments they have at hospitals have had a negative impact on their ability to work or stay in education.

Enabling patients to work has wider benefits to society due to increased income tax, lower benefit spending and increased labour market supply. Based on findings from our survey, we have employed a conservative estimate that 1 in 100 patients who have labelled their condition as less likely to have a negative impact on their work are able to work due to care at home. This generates an economic benefit to society of approximately £28.2 million per year.



Living with ankylosing spondylitis, Martin has been receiving regular deliveries of medicines for 10 years

I need to have injections every two weeks to help me manage my condition. Without these deliveries, this would mean travelling to a clinic every fortnight. It may not sound like a big deal, but being able to manage my medication at home has been a real positive for me. It means that it is just part of my usual routine, and I don't have to go to the trouble of taking time off work to travel to a clinic every two weeks – it allows me to get on with my life and largely not think about my condition or medication.



Reduced journey time and improved geographical access

The burden of travelling to hospital for appointments and prescriptions can be significant. It can mean time off work, travel costs and fatigue from long journeys.

Clinical Homecare reduces the need for people to travel to hospital to obtain their repeat medicines supplies or to have treatment administered, with an average saving of 1.3 hours of travel time per appointment. This is confirmed by our survey, where 78% of respondents expressed that the service eliminates the need to spend time travelling to appointments.

Geographic location can also pose significant barriers to accessing healthcare services for some patients. The average distance that Clinical Homecare patients live from their prescribing hospital is 13 miles, however, many people are much further away. Currently, 75,000 Clinical Homecare patients live at least 20 miles away from their nearest hospital, requiring a minimum 40-mile round trip for healthcare. Within this number, 40,000 Clinical Homecare patients live more than 30 miles from a hospital, meaning they are saved the 60-mile round trips that would be otherwise needed.^{xiii}

This extended travel distance can adversely affect patient's health and well-being. Clinical Homecare can serve as a solution to overcoming these barriers, enhancing healthcare accessibility for patients and addressing existing inequalities.



Living with psoriatic arthritis, James has been receiving regular deliveries of his medicine for 7 years

I get eight weeks' medication, and after about six weeks I get a phone call to book in the next delivery. I can be anywhere when I organise the delivery date. We travel quite a lot, and the service allows me to get on with the things I want to do, knowing I've got a predetermined delivery date. As long as I'm at home for that delivery date, I can get on with my life the rest of the time.



Improved patient adherence

Adhering to prescribed medicines has been shown to be the primary determinant of the success of treatment.^{xivi} Clinical Homecare supports improved adherence in a number of ways, including alleviating the burden of pharmacy visits to refill prescriptions. Respondents to our survey feel that they are supported to make sure they don't run out of supplies (75%) and that any issues are dealt with quickly (76%). 82% also reported that in the last 12 months, they have consistently received all their medicine deliveries without any interruptions.

Some Clinical Homecare services include a formal record of the amount of medicine that the patient reports they have at home. In all cases, Clinical Homecare teams contact patients if they notice the patient doesn't have the expected quantity of medication at home. They will notify the hospital and arrange for an additional prescription if needed. Checking and ensuring patients have the correct amount of medication supports patient safety (overuse), patient adherence (underuse and access to medicines) and reduces waste.

85% of survey respondents receiving Clinical Homecare also reported that their medications or healthcare products have been fully explained to them. This is significantly higher than the Care Quality Commission's latest Adult Inpatient survey which revealed that 62% of respondents were given an explanation of the purpose of the medicine they were given to take home.^{xv}

In our survey, Clinical Homecare users expressed confidence in understanding the safe administration, usage and storage of their medications. Those who received training on medication administration conveyed a high level of confidence in managing their medications.

This enhanced understanding and confidence in Clinical Homecare, as well as regular touchpoints between patients and Clinical Homecare specialists, contributes to improved adherence and better overall outcomes for patients. Previous research has shown people who receive Clinical Homecare are 7.8% more likely to adhere to their prescribed medication.^{xvi}

Improved adherence means that patients are more likely to experience the health benefits of their prescription. It also has a wider economic impact which can be measured by quality-adjusted life years (QALY) – a measure in which the benefits, in terms of length of life, are adjusted to reflect the quality of life.^{xvii} Based on a conservative average QALY estimate of 0.05^{xviii} gained from improved adherence associated with Clinical Homecare, this can be translated into £94 of benefit per patient. In total, this amounts to over £43 million in benefits across all patients receiving Clinical Homecare.

Proper adherence also results in cost and resource savings for the NHS by reducing the need to treat patients who are not adhering to their treatment plan. Based on literature stating that non-adherent patients require three extra medical visits per year, we estimate that the NHS saves £15 million each year on treating non-compliant patients, based on £32 per patient receiving Clinical Homecare deliveries.^{xix}



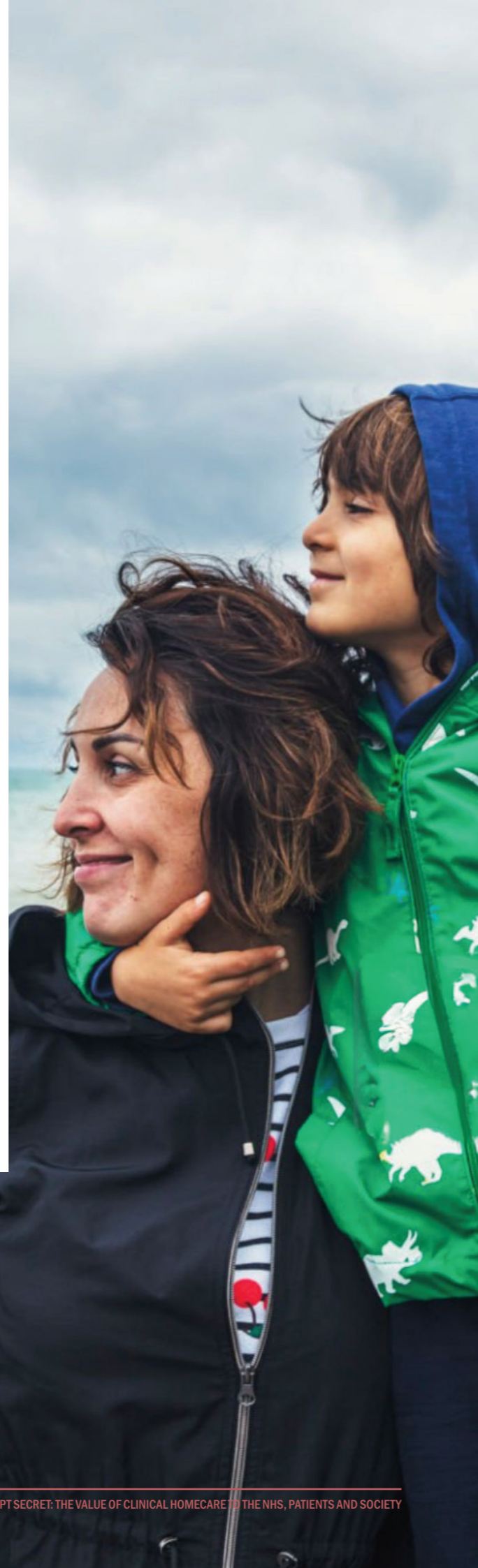
Safeguarding and support

Clinical Homecare provides healthcare professionals with the opportunity to identify and address any potential safety concerns thus enhancing the overall safety and well-being of patients. 78% of survey respondents who receive treatment by a healthcare professional (HCP) at home reported that the HCP who administers their treatment takes time to make sure they are feeling alright.

A further 79% of respondents reported that their HCP ensures they have everything that they need. The corresponding figures for those who do not receive Clinical Homecare are 61% and 64% respectively.

Many individuals with chronic conditions face challenges related to isolation. This can be due to difficulties associated with leaving their homes. Regular interaction with Clinical Homecare providers, including phone calls, visits from delivery drivers and clinical support visits, not only contributes to overall care but also provides essential social interaction for particularly vulnerable patients.

Clinical Homecare also minimises exposure to Healthcare Acquired Infections (HCAIs). These infections are serious adverse events, with 3.5% of patients who acquire a HCAI reported to die from their infection.^{xx} Our modelling shows that Clinical Homecare has the potential to mitigate 621 HCAIs a year across the UK. Based on the risk of patients acquiring a HCAI and the average cost of treating a HCAI, we estimate that the NHS saves £3.3 million on treating HCAIs each year, due to Clinical Homecare.



2

Benefits to the NHS

Clinical Homecare companies provide over £264 million per year in quantifiable value to the UK's health economy. This is delivered through operational savings, improved patient experience and wider benefits.

Based on 2,800,000 deliveries,



140,000 episodes of training,



and 400,000 in person visits each year,



this equates to an annual saving of £509 per patient using Clinical Homecare per year*



Efficiency and resource optimisation

At a time when the NHS is struggling with a workforce crisis, Clinical Homecare can help reduce the burden on hardworking NHS professionals. Evidence suggests that the clinical services delivered by Clinical Homecare companies each year provide additional day-case elective capacity equivalent to 15 NHS Trusts**.

One area where this benefit is felt is in hospital pharmacies. With fewer patients visiting hospital pharmacies 1,100,000 hours a year of NHS pharmacy staff time is saved, equivalent to 705 FTE pharmacy staff. This leads to an aggregated NHS saving of £52 million a year.

Clinical Homecare can also release nursing capacity. As our report shows, patients receiving a mid tech service are provided with training to self-administer their medication, and those receiving high tech services often receive a nurse visit to their home to administer their medication. Delivering this via a Clinical Homecare company saves 900,000 hours a year of NHS nurse staff time, equivalent to 432 FTE nurses. This saves the NHS £36 million a year.

The time saved by hospital staff reduces the pressure on NHS services, which is likely to result in better care for other patients too. Without Clinical Homecare, hospital waiting lists would likely be longer and the NHS would need to hire additional staff to meet the demand.

* Please note that this figure does not include VAT savings. The additional VAT savings are generated because the NHS pays 0% tax on medicines delivered by Clinical Homecare companies.

** Based on a comparison of average day-case appointments per NHS Trust (35,571), compared to the number of high tech Clinical Homecare activities each year (540,479)

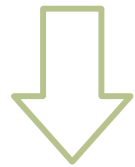


Medicines supply and wastage

Previous research has shown that wasted medicine costs the NHS £375 million a year. Clinical Homecare reduces the number of prescriptions being wasted due to events such as early cancellation or damage during patient transit.

Disruptions to the pharmaceutical supply chain can occur for a variety of reasons, such as issues in manufacturing, delays in quality control testing or transportation, regulatory barriers or even natural disasters. This can prevent patients from getting their medication on time. As Clinical Homecare companies operate across the UK^{***}, when a supply chain disruption occurs Clinical Homecare providers and manufacturers come together to work with NHMC to take a national view on providing medication to patients.

This approach means that, whilst they may have more frequent deliveries more patients will still have access to the medication they need to continue their treatment while the supply chain issue gets resolved.



Reducing Did Not Attend (DNA) rates

The convenience of Clinical Homecare makes it easier for patients to attend their appointment. Data provided by the NCHA shows a lower rate of appointments missed due to the patient not attending training or clinical visit, compared to NHS DNA outpatient appointments (1.9% vs 7.6% DNA rate). This reduction in the number of appointments in which the patient does not attend, saves the NHS £3 million a year.

^{***} Medications are stored and managed by Clinical Homecare providers, in temperature-controlled warehouse facilities across the UK. Clinical Homecare providers manage the dispensing and delivery of these medications, conducting routine deliveries of medications, under temperature-controlled conditions when required, directly to patient's homes.



Medication management

When the need arises for a patient to switch medications, Clinical Homecare providers ensure patients quickly receive the necessary patient education and training from a specialist clinical trainer. This can be conducted in-person or online based on patient preferences. This support can help minimise the time taken to switch medications which can reduce the cost to the NHS for generic launches.

Clinical Homecare companies can also manage the switch to ensure all old medication is used before new medication supplied, thereby reducing wastage even further. This is not done if an urgent switch is needed.

Case study: Adalimumab^{xxii}

In 2018, NHS hospitals spent over £400m on Adalimumab, a biological medicine used to treat rheumatoid arthritis, inflammatory bowel disease and psoriasis. In October 2018, the patent expired meaning cheaper biosimilar alternatives became available.

With national oversight and the ability to operate quickly, Clinical Homecare companies were able to switch patients onto less expensive generic medications at scale, and more quickly than if the onus was on patients to visit a pharmacy to make a change. It is estimated that the industry saved the NHS almost £300 million, based on savings on Adalimumab alone. Without Clinical Homecare, it is believed these savings may have taken up to three years to deliver.



Benefits to society



Environmental impact

The average distance an NHS patient travels to hospital is 16 miles.^{xxiii} By consolidating multiple patient's medications into a single, optimised delivery route, Clinical Homecare providers significantly reduce this to 6.9 miles travelled per patient delivery. As a result, carbon emissions are reduced by 22,000 metric tonnes a year. This approach aligns with the NHS Carbon Footprint Plus target, striving to achieve net zero emissions by 2045.

With fewer cars on the road due to consolidated delivery methods, Clinical Homecare also reduces traffic congestion. This not only contributes to a more efficient use of road infrastructure but also alleviates the strain on transportation systems, making roads less congested and promoting smoother traffic flow within communities. This creates benefits to society worth £16 million a year.



Drug safety

Clinical Homecare enhances pharmacovigilance through patient education, timely intervention, monitoring and robust reporting mechanisms.

Providing medication within the home allows specialist clinical trainers to take the time to educate patients on medication administration, potential side effects and the importance of reporting any unusual symptoms. As patients receiving Clinical Homecare are more likely to report that their products have been fully explained to them, this patient education contributes to a proactive approach to pharmacovigilance in the UK, especially where homecare medicines and devices are novel and/or new to market.

On our mid and high tech pathways, regular nurse visits allow for close monitoring of patients at home, ensuring a more personalised approach to medication management. This facilitates the prompt identification of any issues and allows for quick intervention if there are any signs of adverse effects or complications. Clinical Homecare providers can efficiently report any adverse events directly to pharmaceutical manufacturers, ensuring timely and appropriate actions are taken. While there are clear benefits to individuals, this has a wider societal benefit too, helping ensure safe medicines are being prescribed and used.

Opportunity ahead



Right now, an estimated 31 million people in the UK say they are living with at least one long-term health condition. This means almost half of the UK population may need regular support or treatment to manage their condition.^{xxiv} The burden on traditional healthcare services is clear, with long waiting lists and backlogs in almost all areas of the NHS.

As our population continues to grow, so will the demand on the NHS. It is projected that two-thirds of people over the age of 65 will be living with multiple health conditions by 2035.^{xxv} Looking more broadly, nearly one in five people in the UK will live with a major illness that requires regular healthcare by 2040. This equates to an increase of 2.5 million people living with major illness in 2040 compared with 2019.^{xxvi}

It must also be considered that life expectancy is increasing while the average age at which people are expected to be living with major illness is projected to remain constant at 70 years. This means that by 2040, people are projected to live an average of 12.6 years with major illness, compared to 11.2 years in 2019.^{xxvii}

The current uptake of Clinical Homecare only represents a fraction of the population that could benefit from this service. While not everyone is the right fit for Clinical Homecare, an estimated 6.8 million people are living with an acute or long-term health condition that could be appropriate for Clinical Homecare.^{xxviii} As our report sets out, many of these people could be supported to continue working and living their lives without being defined by their health status.

Clinical Homecare has grown year on year. 300,000 more people benefit from this service than in 2011. If embedded within long-term health service plans, the benefits could be significant. The industry has the capacity and capability to scale at an even greater rate, helping the NHS meet the needs of the future.



As the needs of the NHS grow, the Clinical Homecare industry stands ready to be a supporting partner.

Clinical Homecare can help the NHS to address operational challenges and strategic long-term needs. Our logistics capacity is fully expandable and our patient services are scalable. By working with the manufacturer, our medicine supplies can flex to meet demand. We demonstrated our ability to scale during the COVID-19 pandemic, when we rallied round our partners to deliver at-home care to 80,000 extra patients.

NCHA members are working together to improve the services we offer. We are establishing guidance and frameworks, enabling staff to work across providers, improving equity of access in remote geographical areas. We are also developing other ways to improve efficiency, such as delivering medicines to community hubs. We look forward to working with NHS and pharmaceutical manufacturer partners in the future. Together we can unlock the potential of Clinical Homecare, and help more people access healthcare in the place that best suits them.

Brian Duggan, NCHA Board project lead and General Manager and Superintendent Pharmacist at Polar Speed

Recommendations

The following steps could help to maximise the potential of Clinical Homecare. Clinical Homecare companies, pharmaceutical manufacturers and the NHS should work together to plan and deliver these changes. The NCHA is committed to working with all stakeholders to implement these suggestions, building a system that works for all.

1

Transparency

Meaningful data about operational performance and patient experience would improve understanding and build confidence in the industry. Clinical Homecare companies, pharmaceutical manufacturers and the NHS must work together to deliver this shared ambition, with increased understanding of both NHS and pharmaceutical funded Clinical Homecare.

All parties should work together to curate operational data against KPIs which support the value the NHS wants from Clinical Homecare. This should include:

- Patient safety
- Patient experience
- Clinical outcomes
- Volume
- Performance

Clinical Homecare providers continue to share data with the NHS and pharmaceutical manufacturers, providing operational delivery insight. The NHS and industry should use this information for planning, service development and commissioning purposes. This will help to provide patients with a service that ensures patient safety, efficiency, and value for money.

An annual objective nationwide survey of patients receiving Clinical Homecare could be commissioned, providing objective information about patient experience. This would improve understanding of what is working well and where improvements may be needed at a national and regional level.

Insights from the survey and performance data should be shared with industry and system stakeholders, and with patients and patient groups. This will help inform service development and change, and to build trust in the industry.

2

Oversight

We welcome the government's commitment to appointing a senior responsible officer for Clinical Homecare. This individual must hold a strategic view of the industry and how it could be best used to meet health service and societal needs in the medium and long term.

To ensure a full view of Clinical Homecare, responsibilities should include governance frameworks, clinical delivery and operational oversight, pharmacy, procurement, contracting, and pricing. They will oversee the development of the sector and play a key role in bringing the NHS, pharmaceutical manufacturers and Clinical Homecare providers together to increase openness and transparency.

To support improved accountability, an integrated regulatory framework that encompasses clinical delivery, medicines, and corporate governance should be developed. Responsibility should be shared and integrated between:

- CQC/RQIA/Care Inspectorate, and
- GPhC/Pharmaceutical Society of NI (PSNI).

GPhC should hold overall accountability for regulation. All parties should support the education of regulators and inspectors, ensuring a full understanding of the industry. The Clinical Homecare industry is ideally placed to support creation of an education network and suggests this is in place by the end of 2024.

3

Planning and commissioning

A review of planning and contracting regimes, and a long-term plan for Clinical Homecare could help maximise the opportunity and ensure capacity and resource is available.

Clinical Homecare companies are currently asked to invest in infrastructure and workforce, without any guarantee of long term opportunity. This can be difficult to justify for established organisations and represents a significant barrier to market entry. Strategic commitments and longer term planning are key to sustainable, efficient and effective growth of homecare services.

Regional health systems are ideally placed to oversee short to mid-term planning, and provide clinical delivery and operational oversight of Clinical Homecare. Working closely with purchasing authorities, they have a detailed understanding of service capacity and population needs.

We recommend that regional health systems develop three to five-year plans for Clinical Homecare, linked to wider health service strategies. This could also include co-creation of a longer-term pipeline, developed with clinicians, pharmacists, nurses, and patients. These strategies should align with national plans developed and owned by the NHS' Specialised Commissioning Team and the Commercial Medicines Unit. This pipeline would help Clinical Homecare companies put plans in place to deliver contracted services as efficiently as possible. This would also support innovation over time, shaping market management and reducing barriers to entry for new providers.

4

Funding

Funding and resources should be made available within the NHS for the planning, contracting, commissioning, prescribing and administration of Clinical Homecare. There is currently significant variation, and this can affect patients and the industry.

To achieve this, healthcare systems should review the current contracting capacity and capabilities within their own system, identifying the unmet need for additional resource within and across their system partners.

The NHS could review financial models and support hospitals to use Clinical Homecare in the way that best meets their needs. Under the current system, hospitals are primarily paid by results (PBR) and block contracts for services. When a hospital uses a Clinical Homecare provider, it incurs the company's cost but does not generate PBR income.

These current payment mechanisms can actively incentivise against effective service development. Additionally, the way in which Clinical Homecare services are coded within a hospital can reduce the value of the service. Clinical Homecare is now big enough to be considered its own service. Separate funding codes for Clinical Homecare, based on the value it brings to patients and the wider health system could have a significant enabling impact and avoid perverse incentives that can stop the NHS from using Clinical Homecare to support their patients.

5

Standardisation and innovation

Standardisation across the sector is key to a consistently high-quality service. Technology and innovation can support this agenda.

Successful development and delivery of the NHS' digital platform for Clinical Homecare could facilitate efficient electronic prescribing, contracting and procurement and potentially reduce costs for all. NHS and industry development teams must ensure interoperability with prescribing platforms and electronic patient records, helping ensure consistency and alignment.

We also recommend Clinical Homecare is fully integrated within development of NHS systems including planning platforms. This also extends to new platforms for the recording of safety incidents, facilitating investigation and learning from incidents that cross organisational boundaries. Robust reporting systems and shared learning from incidents will also help to make sure any thematic issues are quickly picked up and addressed. A review panel could be set up to support learning from serious incidents related to Clinical Homecare services.

We also recommend that the NHS and industry work together to trial new innovative delivery models, supporting service development. This could include the use of community hubs for the administration of medicines, helping to reduce costs and increase efficiency.

SECTION 6: APPENDIX

Understanding the nuances and intricacies of the value of Clinical Homecare to the NHS, patients, and society required a comprehensive examination of various data sources, an extensive literature review and a meticulous methodology. The following approach has been adopted to provide a robust foundation for our analysis:

a. Overview, time period and perspective

The time horizon of the economic valuation is the Calendar Year 2022, where possible, all compared costs have been adjusted for inflation, using Consumer Price Index (CPI) inflation data.^{xxix} The study investigates both costs and effects of Clinical Homecare services Ex Post, which means that all costs and benefits have already realised at the time the analysis was conducted and the value for money was measured retrospectively. The patient population has been divided and assesses between patients who historically benefited from the Clinical Homecare services and patients who followed the default NHS pathway.

b. Data sources and literature review

The effectiveness of Clinical Homecare services was rigorously assessed through a multi-faceted approach. This study used data from experiments and comparative analyses, observational studies, surveys, or interviews. It also recognizes the importance of observational data and assumptions. Information sources like government reports, university research, previous economic work, medical journals, and clinical guidelines contribute to offering a comprehensive portrait of healthcare and social care, with vast geo-political insights into the UK. Additionally, metrics on Clinical Homecare services and patient volumes were drawn from the standardised Homecare Medicines and Services Key Performance Indicators (KPIs), ensuring robust, real-world data for the evaluation. Outputs measured via the independent patient survey commission for this report also contributed as data source for the economical evaluation. This broad approach ensures a comprehensive assessment of Clinical Homecare's effectiveness, considering both the controlled settings of trials and the real-world complexities of observational data.

c. Statistical analysis and methods

Our cost-benefit analysis compares the cost and effect of alternative services when provided by Clinical Homecare or the NHS. It measures both costs and effects of services in monetary terms. The literature shared above helped assign a monetary value to each health benefit. The analysis considers a wide range of costs, whoever incurs them and includes different types of health and non-health effects. Hence, the perspective adopted for the analysis is broadly societal, contextualizing the study within decision-making scenarios of policymakers and legislators.

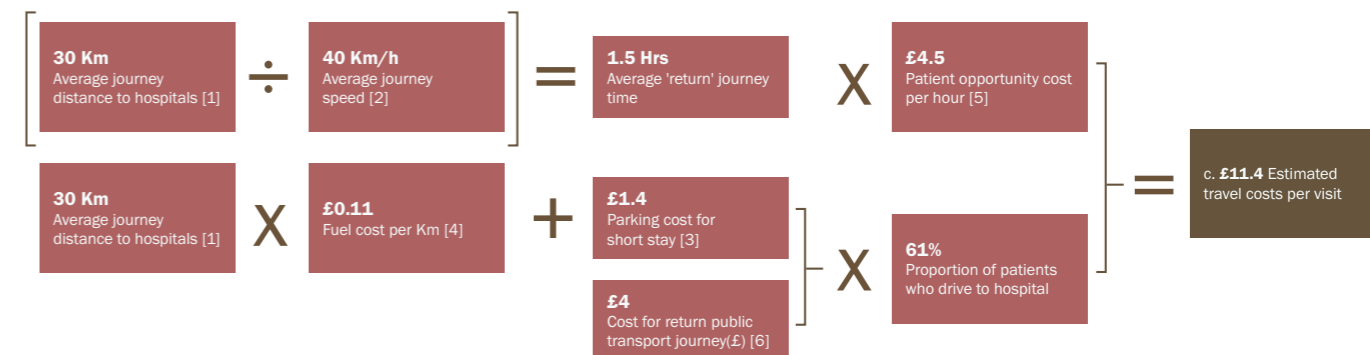
Due to the complexity of the services offered, to work out whether the additional benefits are worthwhile, this report looks at the cost per unit of activity effect. All estimated costs and benefits were calculated using Microsoft Excel.

To demonstrate our process a reported breakdown of the mid tech pathway benefits calculations is below:

Dispense and delivery

Reduced patient journey time

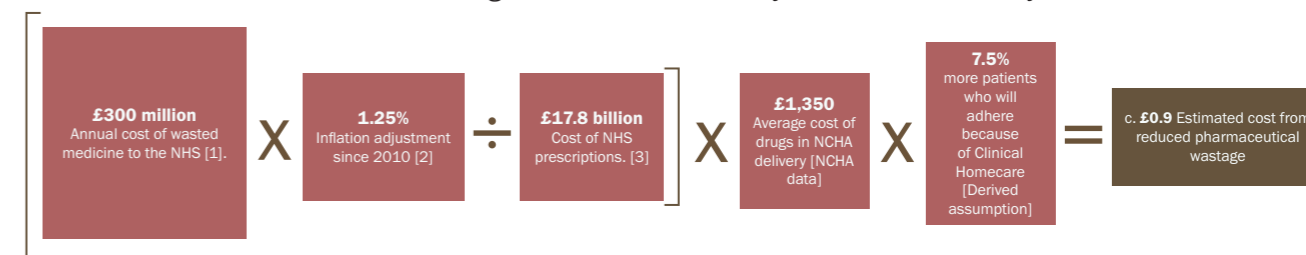
Clinical Homecare offers drug delivery directly to patient's homes. As a result, patients no longer need to travel to hospitals to collect each repeated prescription. This has a tangible impact on cost savings for patients, as they benefit from reduced travel expenses and save on opportunity costs associated with hospital visits.



- https://www.researchgate.net/publication/4798633_Distance_Travelled_in_the_NHS_in_England_for_Inpatient_Treatment
- <https://www.gov.uk/government/statistics/travel-time-measures-for-the-strategic-road-network-and-local-a-roads-january-to-december-2021>
- <https://researchbriefings.files.parliament.uk/documents/CBP-8912/CBP-8912.pdf>
- <https://www.nimblefins.co.uk/largest-car-insurance-companies/average-cost-petrol-car>
- <https://webarchive.nationalarchives.gov.uk/ukgwa/20230602041648/> <https://www.gov.uk/government/publications/tag-data-book>
- <https://www.gov.uk/government/news/2-bus-fare-cap-across-england-to-save-passengers-money>

Reduced pharmaceutical wastage

The implementation of Clinical Homecare contributes to a reduction in pharmaceutical wastage. Home delivery minimises instances of prescriptions being unused due to factors like early cancellation or damage during patient transit. This streamlined approach results in cost savings for the NHS, as there is a decreased need to replace, or re-supply wasted medicine. The optimisation of pharmaceutical resources not only promotes efficiency but also aligns with economic considerations, enhancing the overall sustainability of healthcare delivery.



- <https://bpspubs.onlinelibrary.wiley.com/doi/10.1111/bcp.13613>
- <https://www.ons.gov.uk/economy/inflationandpriceindices#timeseries>
- <https://www.nhsbsa.nhs.uk/statistical-collections/prescribing-costs-hospitals-and-community-england/prescribing-costs-hospitals-and-community-england-202122>
- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3015238/>

Better adherence to medicine

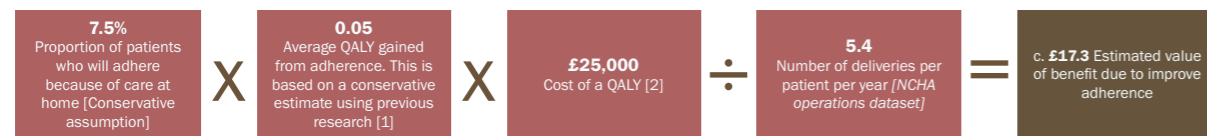
Clinical Homecare facilitates direct drug delivery to patients, thereby diminishing barriers to accessing medicine dosages. Patients are more likely to receive subsequent dosages, as indicated by our patient survey data reflecting improved access to their prescribed medications. Consequently, patients are more inclined to adhere to prescription regimes, promoting better health outcomes. Additionally, the NHS experiences cost savings by mitigating the need to treat patients who may not adhere to prescriptions, thereby reducing the burden on healthcare resources.

Existing literature shows that care at home has a significant, positive impact on adherence for patients who receive the service. This includes a report that showed that homecare improves average patient persistence time (duration a patient adheres to medicine as prescribed) from 315 to 500 days [1].

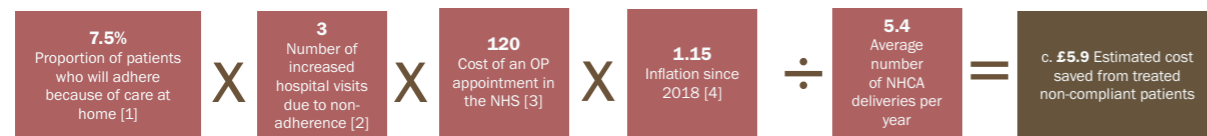
This supports the findings of our patient survey where responses indicate that 85% of patients on Clinical Homecare have had their products fully explained (strongly agree/tend to agree). This is better than the NHS alternative which suggests that 62% of patients have had medicine explained: <https://www.cqc.org.uk/publications/surveys/adult-inpatient-survey>.

Based on evidence from literature and patient surveys that suggest care at home has a positive impact on patients taking medicine as intended, we have employed a conservative estimate that Clinical Homecare improves adherence to prescriptions by 7.5%.

[1] Patient Support Programmes and Patient Adherence, Graeme Duncan. Presentation at 2013 NCHA Conference



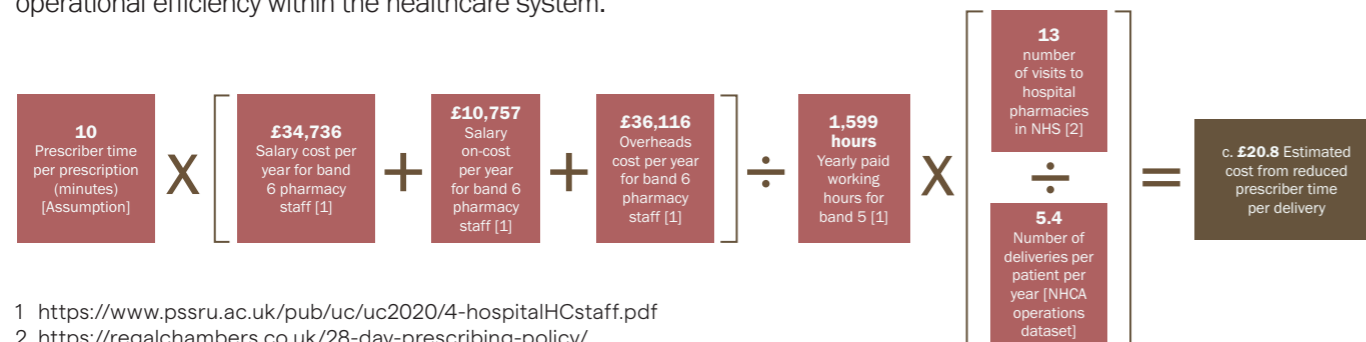
1 https://discovery.ucl.ac.uk/id/eprint/1350234/1/Evaluation_of_NHS_Medicines_Waste__web_publication_version.pdf
2 <https://www.gov.uk/guidance/cost-utility-analysis-health-economic-studies>



1 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3015238/>
2 <https://bmjopen.bmj.com/content/bmjopen/8/1/e016982.full.pdf>
3 <https://www.england.nhs.uk/2018/10/nhs-to-trial-tech-to-cut-missed-appointments-and-save-up-to-20-million/#:~:text=With%20each%20hospital%20outpatient%20appointment,is%20coming%20to%20the%20NHS.>
4 <https://www.ons.gov.uk/economy/inflationandpriceindices#timeseries>

Reduced prescriber time required for repeat prescriptions

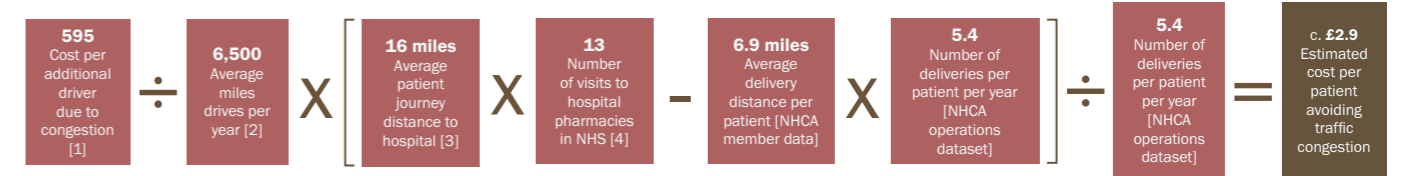
The dispense, delivery and disposal service results in time savings for NHS pharmacy staff who are no longer required to manage patients directly within hospital pharmacies. This time efficiency translates into cost savings for the NHS, as pharmacy staff can redirect their efforts to other critical tasks, optimising resource allocation and improving overall operational efficiency within the healthcare system.



1 <https://www.pssru.ac.uk/pub/uc/uc2020/4-hospitalHCstaff.pdf>
2 <https://regalchambers.co.uk/28-day-prescribing-policy/>

Saved traffic congestion costs per patient

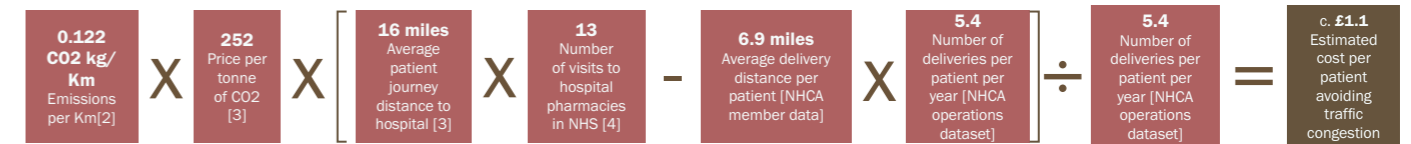
Saving people from travelling to hospital to pick-up their medicines, not only enhances convenience but also results in reduced time and costs associated with traffic congestions for each patient. By circumventing the necessity for hospital visits solely for prescription renewals, the Clinical Homecare home delivery system contributes to a more efficient and cost-effective healthcare experience for patients.



1 <https://inrix.com/scorecard/>
2 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/906276/national-travel-survey-2019.pdf
3 https://www.researchgate.net/publication/4798633_Distance_Travelled_in_the_NHS_in_England_for_Inpatient_Treatment
4 <https://regalchambers.co.uk/28-day-prescribing-policy/>

Saved CO2 emissions cost per patient

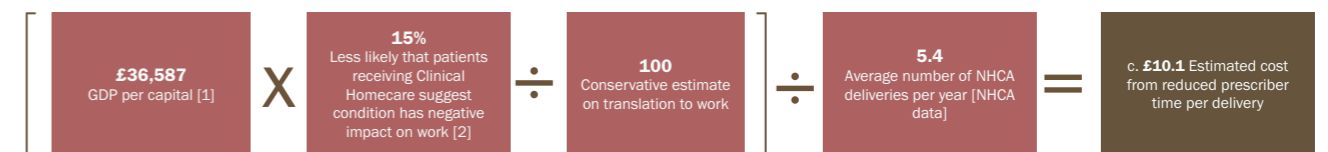
Clinical Homecare not only enhances patient convenience, but also contributes to environmental sustainability by reducing carbon emissions associated with patient journeys.



1 https://www.researchgate.net/publication/4798633_Distance_Travelled_in_the_NHS_in_England_for_Inpatient_Treatment
2 <https://www.gov.uk/government/publications/new-car-carbon-dioxide-emissions>
3 <https://www.gov.uk/government/publications/valuing-greenhouse-gas-emissions-in-policy-appraisal/valuation-of-greenhouse-gas-emissions-for-policy-appraisal-and-evaluation>

Cost benefits per patient returned to workforce

Clinical Homecare fosters proper adherence to prescribed regimes and minimising the time patients spend collecting medicines. This service not only enhances the likelihood of patients experiencing health benefits but also frees up valuable time for individuals, easing the challenges of returning to the workforce. This approach demonstrates a holistic consideration of patient well-being, combining health benefits with practical solutions to improve overall quality of life.



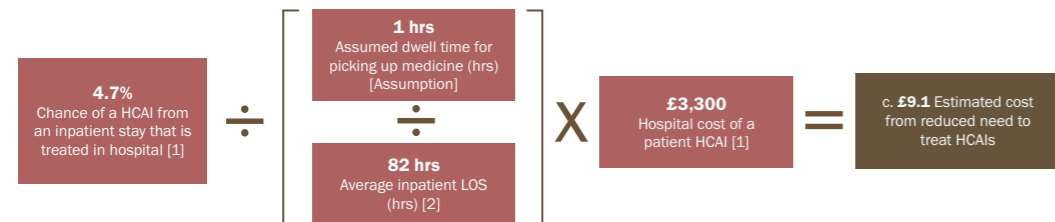
1 <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=GB>
2 This value will be taken from the patient survey data. 0.2% is used as a conservative estimate while we collect data.

Home training benefits

In addition to previous benefits listed above, mid-tech patients undergoing home training have the following benefits.

Improved infection control

Clinical Homecare eliminates the necessity for patients to visit hospitals for training or therapies. This reduction in hospital visits significantly lowers the likelihood of patients acquiring healthcare-associated infections (HCAI). The consequential decrease in HCAI cases not only safeguards patient health but also translates as less money is required for the treatment of infections in hospital settings. These infections are serious adverse events with a 4% chance of death.



- 1 Healthcare-associated infections: prevention and control in primary and community care, 2017, NICE
- 2 [https://www.health.org.uk/publications/long-reads/longer-hospital-stays-and-fewer-admissions#:~:text=Average%20length%20of%20stay%20in,to%205.1%20days%20\(3%25\).](https://www.health.org.uk/publications/long-reads/longer-hospital-stays-and-fewer-admissions#:~:text=Average%20length%20of%20stay%20in,to%205.1%20days%20(3%25).)
- 3 <https://regalchambers.co.uk/28-day-prescribing-policy/>

Reduced nurse costs

Clinical Homecare offers virtual nurse sessions to train patients in administering medication, leading to a reduction in the demand for NHS nursing resources. This streamlined approach not only optimises the utilisation of healthcare personnel but also results in cost savings by minimising the need for hiring additional nurses and associated overhead expenses. The incorporation of virtual training sessions reflects an innovative and cost-effective strategy to empower patients while efficiently managing healthcare resources.



- 1 <https://kar.kent.ac.uk/92342/25/Unit%20Costs%20Report%202021%20-%20Final%20version%20for%20publication%20-%28AMENDED%29.pdf>

Reduced DNA rates for remote sessions

Self-administration training via virtual sessions presents a more accessible option for patients, leading to a lower rate of Did Not Attend (DNA) compared to NHS outpatient appointments. This reduction in DNAs translates to cost savings for the NHS by minimising the number of appointments where patients do not attend. The efficiency and convenience of virtual sessions not only enhance patient engagement but also contribute to economic benefits through the optimisation of healthcare resources and reduction in associated costs.



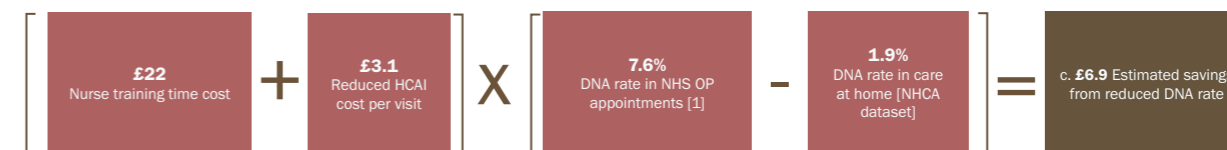
- 1 <https://www.england.nhs.uk/long-read/reducing-did-not-attends-dnas-in-outpatient-services/#:~:text=Of%20the%20103%20million%20outpatient,of%20650%2C000%20monthly%20appointment%20slots>

Healthcare professional home visits exclusive benefits

In addition to previous benefits listed above, high-tech patients receiving visits from healthcare professionals in the home have the following benefits.

Reduced healthcare professional costs

Clinical Homecare offers a dual approach, providing virtual sessions with a specialist clinical trainer for patient training on medication self-administration or visits to the patient's residence to administer or train the patient to self-administer. This strategy effectively frees up NHS nursing resources, optimising their utilisation. The reduction in the need for hiring additional nurses and associated overhead costs represents a cost-effective and efficient healthcare model.



- 1 <https://kar.kent.ac.uk/92342/25/Unit%20Costs%20Report%202021%20-%20Final%20version%20for%20publication%20-%28AMENDED%29.pdf>

Reduced DNA rates for in-person sessions

Similar to virtual training, sessions where Clinical Homecare staff travel to patient residences are more accessible for patients, resulting in a lower DNA rate compared to NHS appointments. This reduction in DNAs translates to cost savings for the NHS by minimising the number of appointments where patients do not attend.



- 1 <https://www.england.nhs.uk/long-read/reducing-did-not-attends-dnas-in-outpatient-services/#:~:text=Of%20the%20103%20million%20outpatient,of%20650%2C000%20monthly%20appointment%20slots>

Additional supporting documents

Any additional documents, surveys, or raw data that may be relevant for the readers. All accessed in January 2024

ⁱ Based on NCHA data, December 2023

ⁱⁱ Taken from Manchester University NHS Foundation Trusts' explanation of Clinical Homecare (Accessed via <https://mft.nhs.uk/mri/services/pharmacy/homecare/>)

ⁱⁱⁱ Taken from National Clinical Homecare Associations'; About <https://www.clinicalhomecare.org/about-ncha-for-hcp-pharma/>

^{iv} National Homecare Medicines Committee (NHMC) Standard Service Areas – SPS - Specialist Pharmacy Service – The first stop for professional medicines advice (Accessed via <https://www.sps.nhs.uk/articles/national-homecare-medicines-committee-nhmc-standard-service-areas/>)

^v Contracting of Homecare Medicines Services, East of England NHS Collaborative Procurement Hub (Accessed via <https://www.eoecph.nhs.uk/Contracting-of-Homecare-Medicines-Services.htm>)

^{vi} Professional Standards for Homecare Services in England, September 2013, Royal Pharmaceutical Society (Accessed via <https://www.rpharms.com/Portals/0/RPS%20document%20library/Open%20access/Professional%20standards/Professional%20standards%20for%20Homecare%20services/homecare-standards-final-sept-13.pdf>)

^{vii} Contracting of Homecare Medicines Services, East of England NHS Collaborative Procurement Hub (Accessed via <https://www.eoecph.nhs.uk/Contracting-of-Homecare-Medicines-Services.htm>)

^{viii} About adalimumab - NHS (Accessed via <https://www.nhs.uk/medicines/adalimumab/about-adalimumab>)

^{ix} Fiscal risks and sustainability report, July 2023, Office for Budget Responsibility. (Viewed January 2024 via <https://obr.uk/frs/fiscal-risks-and-sustainability-july-2023/>)

^{ix} 'Understanding Clinical Homecare' 2023. The research for National Clinical Homecare Association was carried out online by ZPB Associates between 24/11/2023 to 11/12/2023 amongst a panel resulting in 804 UK representative adults responding. The survey sample was sourced from very large, worldwide consumer panel databases, members of which have consented to be contacted online for market research. The panel conforms to GDPR with data fully anonymised. NCHA or other parties involved had no influence on the responses or the respondents taking part.

^x Fiscal risks and sustainability report, July 2023, Office for Budget Responsibility. (Viewed January 2024 via <https://obr.uk/frs/fiscal-risks-and-sustainability-july-2023/>)

^{xi} Benefit expenditure and caseload tables 2023, April 2023, Department for Work and Pensions (Viewed January 2024 via <https://www.gov.uk/government/publications/benefit-expenditure-and-caseload-tables-2023>)

^{xii} Fiscal risks and sustainability report, July 2023, Office for Budget Responsibility. (Viewed January 2024 via <https://obr.uk/frs/fiscal-risks-and-sustainability-july-2023/>)

^{xiii} Based on data provided by NCHA member. Approximately 14% of people receiving Clinical Homecare live more than 20 miles from their nearest hospital. 11% live more than 30 miles from their nearest hospital.

^{xiv} Patient Medication Adherence: Measures in Daily Practice, 2011 Beena Jimmy and Jimmy Jose (Accessed via <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3191684/>)

^{xv} Adult inpatient survey 2022, Care Quality Commission (Accessed via <https://www.cqc.org.uk/publications/surveys/adult-inpatient-survey>)

^{xvi} Mail-Order Pharmacy Use and Adherence to Diabetes-Related Medications National Library of Medicines, 2011 (Accessed via <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3015238/>)

^{xvii} Definition of QALY take from National Institute for Health and Care Excellence Glossary (Accessed via <https://www.nice.org.uk/glossary>)

^{xviii} Evaluation of the Scale, Causes and Costs of Waste Medicines, York Health Economics Consortium, 2011 (Accessed via https://discovery.ucl.ac.uk/id/eprint/1350234/1/Evaluation_of_NHS_Medicines_Waste__web_publication_version.pdf)

^{xix} Economic impact of medication nonadherence by disease groups: a systematic review, BMJ (Accessed via <https://bmjopen.bmj.com/content/bmjopen/8/1/e016982.full.pdf>)

^{xx} Modelling the annual NHS costs and outcomes attributable to HCAs in England, 2019, BMJ (Accessed via <https://bmjopen.bmj.com/content/10/1/e033367>)

^{xxi} Taken from NHS England News page: NHS England » NHS set to save record £300 million on the NHS's highest drug spend

^{xxii} NHS set to save £150 million by switching to new versions of most costly drug, NHS England 2018 (Accessed via <https://www.england.nhs.uk/2018/10/nhs-set-to-save-150-million-by-switching-to-new-versions-of-most-costly-drug/>)

^{xxiii} Distance travelled in the NHS in England for Inpatient Treatment (Accessed via https://www.researchgate.net/publication/4798633_Distance_Travelled_in_the_NHS_in_England_for_Inpatient_Treatment)

^{xxiv} UK health indicators: 2019 to 2020, Office for National Statistics. UK health indicators: 2019 to 2020. (Accessed January 2024 via <https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthandlifeexpectancies/bulletins/ukhealthindicators/2019to2020>)

^{xxv} Projections of multi-morbidity in the older population in England to 2035: estimates from the Population Ageing and Care Simulation (PACSim) model Andrew Kingston, Louise Robinson, Heather Booth, Martin Knapp, Carol Jagger, May 2018 (Viewed January 2024 via <https://academic.oup.com/ageing/article/47/3/374/4815738>)

^{xxvi} Watt T, Raymond A, Rachet-Jacquet L, Head A, Kypridemos C, Kelly E, Charlesworth A. Health in 2040: projected patterns of illness in England. The Health Foundation; 2023 (Accessed in January 2024 via <https://www.health.org.uk/publications/health-in-2040>)

^{xxvii} Watt T, Raymond A, Rachet-Jacquet L, Head A, Kypridemos C, Kelly E, Charlesworth A. Health in 2040: projected patterns of illness in England. The Health Foundation; 2023 (Accessed in January 2024 via <https://www.health.org.uk/publications/health-in-2040>)

^{xxviii} Based on:

- 2.5m with Musculoskeletal (MSK) conditions
- 1152 with Hereditary angioedema (HAE)
- 700,000 with viral hepatitis
- 24,000 with blood disorders
- 3 000 000 with cancer
- 8,267 with hypertension
- 400 with lysosomal storage disease
- 500,000 with Crohn's
- 296,000 with colitis
- 130,000 with MS
- 153,000 with Parkinson's Disease
- 10,800 with Cystic Fibrosis
- 30,000 with Idiopathic pulmonary fibrosis (IPF)

^{xxv} Taken from Bank of England inflation calculator (Accessed via <https://www.bankofengland.co.uk/monetary-policy/inflation/inflation-calculator>)

